Revue suisse Zool.	Tome 85	Fasc. 1	p. 111-114	Genève, avril 1978

A Few Notes on a Remarkable South African Troglobitic Spider, *Cangoderces lewisi* Harington, 1951 (Araneae, Telemidae)

by

Paolo Marcello BRIGNOLI

With 3 illustrations

Abstract

The hitherto unknow ♂ of *Cangoderces lewisi* Harington, 1951 is illustrated; this species belongs to the Telemidae (and not to the Leptonetidae).

The well-known Swiss speleologist, Dr. Pierre Strinati, has collected recently in South Africa (and Namibia) an interesting material of cavernicolous spiders. Some of the species of this collection (which I hope to study completely in brief) were already known: one of these is perhaps the most interesting South African troglobitic spider, *Cangoderces lewisi* Harington.

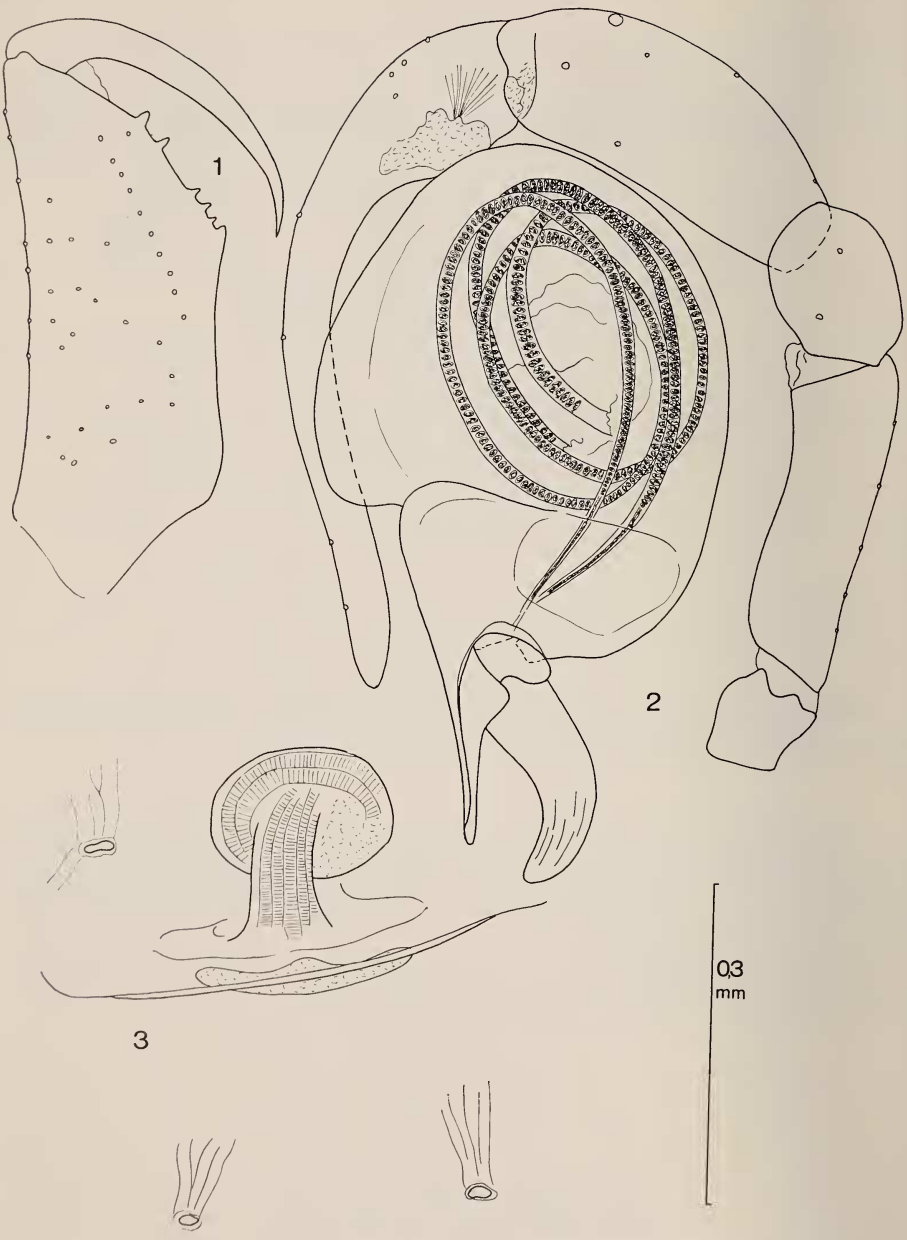
I thank Dr P. Strinati and Dr. B. Hauser (Muséum d'Histoire Naturelle de Genève) for the opportunity given to me of examining this material.

Fam. Telemidae

Gen. **Cangoderces** Harington, 1951

Cangoderces lewisi Harington, 1951

Examined material: Cape Province, Cango Caves, Oudtshoorn, 7.VIII.75, P. Strinati leg., 2 ♂♂, 9 ♀♀ (1 ♂, 1 ♀ in my collection, the rest in the collection of the Geneva Museum).



Cangoderces lewisi Harington, 1951 — Fig. 1: chelicera; fig. 2: bulbus; fig. 3: vulva and tracheal spiracles.

Remarks: the original description is fairly good; only a few points must be corrected. The vulva (fig. 3) is formed by a relatively sclerotized tube which ends in a rounded poach; the respiratory system is of the type usual in the Telemidae, e.g. with no lungs and four independent tracheal stigmata. The—hitherto unknown—male has a large bulbus, of a shape normal in this family; the tarsus of the pedipalp is very long and slender; femur, patella and tibia are in no way modified.

The most curious morphological point in the bulbus is the presence of a double "ductus ejaculatorius" (fig. 2); both, as normally, depart from the reservoir. The general structure of this bulbus is apparently of the "Dysderoid type" (sensu Cooke, 1970).

The greatest part of both ducti was filled, in the examined specimen, with what can not be else than sperm; the sperm was arranged in a very regular way; I have tried to reproduce in figure 2 what I saw (and understood). Also the vulva (fig. 3) was apparently filled with tubular sacs. In a recent paper (Brignoli, 1974), basing myself on observations on other haplogynae spiders, I have advanced the hypothesis that in some spiders at least, the sperm could be ejaculated, collected by the bulbi, and ejaculated again not in a purely liquid form, but "glued" together in some way. This could explain the presence of spermatic "strands" which can be found often protruding from the bulbi of some Haplogynae. What I suppose is evident: the "sacs" seen in figure 3 could correspond to these "strands". Even the curious appearance of the vulvae of other Telemidae (*Usofila* sp. in Brignoli 1973; *Apneumonella oculata* in Simon & Fage 1922) could be so explained.

The position in the system of the genus *Cangoderces:* this genus was described as a Leptonetid; it is evident, by the position of the eyes, the morphology of the ♂♀ genitalia and of the colulus, the structure of the respiratory system, that it has nothing to do with this family nor with the Ochyroceratidae.

By all characters (for those not illustrated here, see Harington 1951) it is evident that de Barros Machado (1956) was right in considering it a Telemid. Between the known species of this family, the most near to it seems to be—as I have already observed-*Apneumonella jacobsoni* Brignoli, 1977 from Sumatra. Unfortunately, until a male of an *Apneumonella* shall be known, it is impossible to evaluate the affinities between these two genera.

Appendix — *Speleoderces scutatus* Lawrence, 1964: lack of time prevents me from publishing here notes on the material of this species collected by Dr. Strinati; it shall be sufficient to note that this genus, described as belonging to the Leptonetidae Ochyroceratinae, has nothing to do with these two families; by general morphology and structure of the ♂ —genitalia, *Speleoderces* Lawrence, 1964 belongs to the family Anapidae (= Symphytognathidae Auct., partim) and seems even a synonym of *Pseudanapis* Simon, 1905.

Summary

The hitherto unknown ♂ of *Cangoderces lewisi* Harington, 1951 is illustrated; this species does not belong to the Leptonetidae but to the Telemidae. Some morphological remarks are made on this species. *Speleoderces scutatus* Lawrence, 1964 does not belong to the Ochyroceratidae (nor Leptonetidae) but to the Anapidae; *Speleoderces* Lawrence, 1964 is a probable synonym of *Pseudanapis* Simon, 1905.

BIBLIOGRAPHY

Brignoli, P. M. 1973. I Telemidae, una famiglia di ragni nuova per il continente americano. *Fragm. ent.* 8: 247-263.

— 1974. Tetrablemmidae dell'Angola e dello Zaire. *Publções Cult. Co. Diam. Angola* 88: 177-196.

— 1977. Two new spiders from Sumatra. *Zool. Meded.* 50: 221-229.

Cooke, J. A. L. 1970. Spider genitalia and phylogeny. *Bull. Mus. natn. Hist. nat. Paris* 41 (Suppl. 1) 142-146.

Harington, J. S. 1951. A new Leptonetid spider, *Cangoderces lewisi* n. gen. n. sp., from the Cango Caves, Oudtshoorn. *Ann. Natal Mus.* 12: 81-90.

Lawrence, R. F. 1964. New cavernicolous spiders of South Africa. *Ann. S. Afr. Mus.* 48: 57-75.

Machado, A. de Barros 1956. Captures d'araignées Telemidae au Congo Belge et paleogeographie de cette famille. *Folia Scient. Afr. Centr.* 2: 26-27.

Simon, E. et L. Fage 1922. Araneae des grottes de l'Afrique Orientale. *Archs. Zool. exp. gén.* 60 (Biospeologica 44): 523-555.

Author's address:

Istituto di Zoologia
Piazza Regina Margherita 7
I-67100 L'Aquila, Italia